

CHAPTER

5th

Hospital

PATHOPHYSIOLOGICAL MECHANISM OF DISEASE

STRESS: is a state of physiological & psychological strain, pressure or tension resulting from adverse or demanding circumstances.

STRESSORS: is a chemical or biological agent, env. condition, external stimulus or an event seen as causing stress to an organism.
Something that causes a state of strain or tension.

TYPES OF STRESS

- **Positive stress**: has a +ve effect on the individual. It provides motivation & urges us to challenge for environmental changes & situations.

- **Negative stress**: has -ve effect on individual & impairs physical, mental and spiritual health. It is manifested by:

- Insomnia
- Headache
- Anorexia
- Irritability
- GIT upset

- **Traumatic stress**: This stress is result from any kind of injury. from accident.

- **Routine stress**: This stress is related

to families, social, home responsibilities
 & work pressure.

TYPES OF STRESSORS

• Physiological Stressors:

- Infections: bacterial, viral, fungal, protozoal
- Alcoholism
- medications/drugs
- Injuries/Trauma
- Inadequate sleep or rest
- Hormonal fluctuations

• Psychological Stressors

- Anger
- Anxiety
- Loss of self control
- Frustrations

• Environmental Stressors

- Excessive traffic
- Extreme hot & cold
- Occupational hazards

- Pollutions:

- a) Water pollution
- b) Air pollution

c) Noise pollution.

• Social Stressors

- low Socioeconomic status.
- Losses of social support.
- Losing of loved ones.
- work demands.

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- ### Biological Stressors
- Hypertension
 - Stroke (CVA)
 - Sexual dysfunction
 - Tuberculosis
 - Cancer
 - Allergy

STRESS ADAPTATION

Stress adaptation is the condition when the individual accepted the stressors or stressful events.

- ### Physiological Effects
- Fatigue
 - Sleep problems
 - Palpitations
 - Decreased sex drive
 - Loss of appetite
 - Headache
 - Muscular pain
 - Shaking
 - Crying
 - Menstrual cycle changes

- ### Psychological effects
- Depression
 - Irritability
 - Loss of temper
 - Drug abuse
 - Restlessness
 - Anxiety
 - Anger
 - Nervousness

- ### Behavioural effects
- Social withdrawal
 - Intake of alcoholism
 - Excessive excitement
 - Angry outbursts

Diagnosis

General diagnosis
It is based on physical & psychological behavioural changes

Laboratory diagnosis

The epinephrine & nor-epinephrine are released to stress response.

Stress Management

General Management

- History collection by questionnaires;

- General

- Background

- Family history

- Personal history

- Life style status

- a) Exercise

- b) diet

- c) sleeping

- d) Drinking

- e) smoking

- Physical Assessment:

- Vital sign

- Head to toe examination

- Lab investigations

- Serum analysis

- Blood test

- Height

- Weight

- BMI

- Medications:

- Mantra meditation: involves repetition of one calming word.

- Transcendental meditation: This technique involves repetition of the individual name who assigned mantras.